CASE STUDY

Implementing Large-Scale Land Activation through UCF at Marathon Gardens
Dearborn, Michigan

Introduction

In the early 2000s, leadership at the Marathon Detroit Refinery initiated a project designed to acquire, activate and beautify the land parcels surrounding the facility. The project was intended to serve as a community outreach effort and green infrastructure pilot project, promoting recreation, ecological restoration and urban agriculture on land owned by the company, but accessible to nearby residents. Hundreds of lots have been acquired through a voluntary buy-out program that residents of remaining homes can opt into. Working with the Detroit Land Bank, Marathon has also acquired vacant land and structures slated for demolition.

While a substantial amount of land is now under Marathon ownership, thus far few activation steps have been carried out beyond the establishment of a WHC-certified forest restoration plot along the Rouge River, as priorities and the feasibility of implementation have changed since the initial envisioning took place. Upon engaging with the *Across Fence Lines* steering committee, refinery leadership chose to pivot from forest regeneration to urban and community forestry. In November 2021, Marathon and its partners planted 150 trees along the future site of a recreation trail. As the effort progresses, the mobilization of community members, industrial partners and Marathon employees will tie into broader strategy and goalsetting, poising Marathon for more extensive UCF, green infrastructure and community outreach efforts.

Key Business Drivers

Business Driver 04 - Social License to Operate

Refinery leadership is proactively working to reduce emissions and connect to the surrounding community with solution-oriented projects, improving on a contentious history with some residents and environmental advocacy groups stemming from legacy and current environmental conditions.

Business Driver 06 - Community Engagement

This effort builds on the Marathon Detroit Refinery's active participation and support of the Fort Rouge Gateway Partnership. The decision to plant a subset of the vacant lots follows the 2020 ribbon cutting at the Marathon-supported Fort Street Bridge Park, directly adjacent to both the plant entrance and the area chosen for pilot plantings.

Business Driver 09 - Sustainability Goals and Performance

With a robust internal framework for ESG reporting, Marathon's project involves the calculation of metrics including stormwater capture, carbon sequestration, urban heat island mitigation and particulate matter capture. Metrics are calculated predicting impacts over 5-year, 10-year and 40-year potential project lifespans.

Alignment with Ten-Year Urban Forestry Action Plan Goals

Goal 2 - Promote the Role of Urban and Community Forestry in Human Health and Wellness – Marathon has sought to select tree species to meet specific project needs: to provide and uplift wildlife habitat value and alleviate community-identified issues of odor, poor air quality and the need for flood mitigation. Quantification and promotion of the selected species' benefits improve community understanding of the roles that trees play in holistic health improvement.

Goal 3 - Cultivate Diversity, Equity, and Leadership Within the Urban Forestry Community - Assessments are underway into the potential of partially transitioning Stellantis' current lawn maintenance crews to tree care or nursery operation.

Goal 6 - Diversify, Leverage and Increase Funding for UCF – Marathon's choice to begin investing in relatively large-scale, high-impact urban plantings is a direct result of active engagement with the *Across Fence Lines* Steering Committee.

The Community

Located at the confluence of the Rouge and Detroit Rivers, the Marathon Detroit Refinery has been in operation since 1930. It is located within the 48217 zip code, frequently cited as the most polluted zip code in Michigan, and one of the five most polluted zip codes in the country. The community has also been listed as a Great Lakes Area of Concern by the EPA, and has attracted attention from environmental activists advocating for improved living conditions for residents. With 38.1% of residents below the poverty line and demographics comprised of 82% people of color, Marathon's efforts to address legacy pollution and abate ongoing impacts have been heavily scrutinized. The outcomes of company plantings are also quantified to track progress toward meeting the River Rouge Area of Concern delisting criteria.

The Marathon Gardens project properties overlap with the planned greenway for the Iron Belle Trail and connect directly to the Fort Street Bridge Park and a kayak launch site.

Plantings adjacent to these areas have necessitated a more open, park-like canopy rather than the closed canopy structure found in many woodlands.

Challenges

While Marathon employees initiated a successful forest restoration project that has achieved WHC Conservation Certification®, turnover of project managers and a change of Refinery leadership have challenged the sustainability and scalability of the effort. Resetting internal and external expectations for the Marathon Gardens project to align with revised corporate and community priorities has required open communication, transparency and complex stakeholder engagement at key junctures in the redesign and implementation processes. Additionally, continuing land acquisition from the Detroit Land Bank is predicated on successful activation of lots already purchased, which has hastened the timeline for planning and implementation.

Opportunities

Leveraging Engagement with WHC - The Marathon Gardens conservation program, which consists of a forest habitat and associated education and species management efforts, achieved gold-tier WHC certification in 2021. Site employees leveraged this achievement to recruit an established base of community volunteers experienced in tree planting, forest maintenance and forest health monitoring. Fellow WHC members DTE Energy and Waste Management, who each have operations nearby, have also assisted in Marathon's UCF efforts.

Maximizing the Potential of Landholdings – Marathon's ownership of a significant amount of land by the Rouge and Detroit Rivers has allowed for the scale and capacity of its UCF work to exceed that of many corporate plantings. The proximity of local parks and recreation access points has allowed for planning to incorporate a broad variety of stakeholder goals such as future use of the site for the Iron Belle Trail, visual screening of the Fort Street Bridge Park's parking lot, and for both completed and future plantings to support stormwater and sediment runoff goals within the Area of Concern.

Mobilizing Existing Contractors - While the planting site is publicly accessible and open to community use, the direct proximity to refinery operations allow for Marathon's landscaping contractors to facilitate tree survival by watering and maintaining planting sites in lieu of continuing to mow lots covered in empty grass.

Partners

- Allen Landscaping
- Detroit Land Bank
- DTE Energy
- Friends of the Rouge

- Fort Rouge Gateway Partnership
- Marathon Petroleum
- PEA Group
- Waste Management
- Wildlife Habitat Council

Key Takeaways

- UCF has provided Marathon with an easy entry point to activating land on a large scale in an urban context. The establishment of an open and park-like urban forest presented an opportunity for Marathon and its partners to activate a large amount of land inclusively in a way that ties into future efforts and broader green infrastructure goals.
- Strong commitment by refinery leadership and past efforts securing land provided for a streamlined launch of this effort, poising Marathon to advance significant forestry efforts on remaining open parcels.
- Clearly articulated metrics capturing the benefits of planting efforts play an important role in both internal ESG reporting within Marathon's corporate structure, and in the ability of refinery leadership to convey value to community members and secure support for project continuation.

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